

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,644	06/25/2003	James D. Burrington	3215	2753
7590 01/31/2006			EXAMINER	
THE LUBRIZOL CORPORATION			MCAVOY, ELLEN M	
Patent Administrator - Mail Dorp 022B 29400 Lakeland Boulevard Wickliffe, OH 44092-2298			ART UNIT	PAPER NUMBER
			1764	

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Commons	10/603,644	BURRINGTON ET AL.				
Office Action Summary	Examiner	Art Unit				
	Ellen M. McAvoy	1764				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 09 No	ovember 2005.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1,2 and 5-24</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)☐ Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1,2 and 5-24</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner	r.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the o	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
obs the diagonal detailed office detail for a list (	or the certified copies flot receive	u.				
Mark 413						
Attachment(s)  Notice of References Cited (PTO-892)	4) The later to 10 min	(DTO 442)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)  Interview Summary Paper No(s)/Mail Da	ate				
B) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 10 August 2005.	5) Notice of Informal P	atent Application (PTO-152)				
	٠, <u>١</u> ٥٠١٠٠٠					

Art Unit: 1764

### Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2 and 5-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Higton et al (6,310,010).

Applicants' arguments filed 09 November 2005 have been fully considered but they are not persuasive. As previously set forth, Higton et al ["Higton"] discloses concentrates for lubricating oil compositions which are prepared by mixing at elevated temperatures (i) at least one high molecular weight ashless dispersant; (ii) at least one oil soluble overbased metal detergent; and (iii) at least one surface-active agent comprising a low molecular weight hydroxyl or amine group. Higton teaches that while it is convenient to provide "additive packages", some of the additives such as overbased metal detergents and high molecular weight dispersants tend to interact with each other, and that in some instances, the interaction results in gelation. See column 1, lines 30-48. While not wishing to be bound by theory, Higton believes that the dispersant/detergent complex causes an increase in viscosity because the lipophilic groups of the

Application/Control Number: 10/603,644 Page 3

Art Unit: 1764

ashless dispersant of one complex can interact with the lipophilic groups of another complex. Higton teaches that the viscosity may rise uncontrollably to the extent that gels may form which is referred to as the Weissenberg Effect. See column 2, lines 30-43. Suitable ashless dispersants include polyisobutylene succinimides and Mannich base condensates. See column 5, line 62 to column 11, line 22. Suitable detergents include oil-soluble overbased sulfonates, phenates, sulfurized phenates, and salicylates of alkali or alkaline earth metals. See col. 11, lines 23-56. Higton also allows for the addition of other additives to the concentrate such as antioxidants, anti-wear agents and viscosity modifiers. See column 5, lines 8-17. The examiner maintains the position that Higton meets the limitations of the claims when the dispersant/detergent/antioxidant combination in the additive package forms a gel. Example 1 in column 17 sets forth a blend of an ethylene-butene copolymer substituted dispersant and an overbased detergent containing magnesium sulfonate with a TBN of 400. The Weissenberg Effect (gelling) occurred in several additive packages as shown in Table 1. Although reducing emissions is not taught, Higton teaches that the gels are suitable for use as lubricants in gasoline and diesel engines and the property of reducing emissions is seen to be inherent.

#### Applicants argue that:

"Applicants have amended claim 1 to define the formula of the gel as being three (3) different components, which are not identical to nor taught by the Higton, et al. reference.", and that "Higton, et al. teaches a composition that requires a surface active agent, a dispersant and a detergent, see column 3, lines 34 through 37. In contrast, Applicants' gel composition is represented by the formula A + B + C, as amended in claim 1, and is a different composition in that it does not require a surface active agent."

Application/Control Number: 10/603,644

Art Unit: 1764

This is not deemed to be persuasive since it is not clear how the claimed composition contains different components. As set forth above, the composition of the prior art contains (i) at least one high molecular weight ashless dispersant; (ii) at least one oil soluble overbased metal detergent; and (iii) at least one surface-active agent. The composition may additionally contain other additives such as antioxidants, anti-wear agents and viscosity modifiers. Applicants' openended claim language "comprising" allows for the addition of other additives to the composition such as the surface active agent of the prior art. The claims at issue do not exclude the surface active agent of Higton.

## Applicants argue that:

"Higton, et al. teaches away from Applicants' claimed invention because Higton, et al. teaches that the overbased detergent and dispersants are impossible to blend into a finished lubricating oil composition. Applicants have shown that gels can, in fact, be blended into finished oils. Further, Applicants' gel releases components over time. In contrast, Higton, et al.'s composition does not release components into the fluid at all. Thus, Applicants' invention that claims as a gelled composition, as identified in claim 1, as amended, is neither suggested nor taught by Higton, et al. Accordingly, this rejection should be withdrawn."

This is not deemed to be persuasive because Higton teaches that the dispersant, detergent and surface-active agent of the invention must be "oil-soluble" or "oil-dispersible" in the oleaginous carrier or oil of lubricating viscosity. See column 4, lines 45-57. The surface active agent may be present in the prior art composition in an amount of only about 0.1 weight %, and the other additive components including antioxidants may be added to the prior art composition in an amount of 0.1 to 10 weight %. Thus, it is not clear how the prior art composition which contains the same dispersant, detergent and antioxidant components as the claimed invention

Art Unit: 1764

plus the addition of 0.1 weight % of a surface active agent differs from the claimed invention.

Although Higton does not teach the claimed proviso "wherein the gel components are controlled released", the examiner is of the positon that since the compositions may be the same, the property of controlled release is also the same.

#### Conclusion

The rejection of claims 1-24 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over copending applications 10/603,517, 10/603,894 and 10/964,435 made in the previous office action are withdrawn in view of the terminal disclaimers filed 09 November 2005. The rejection of claims 1-24 under 35 USC 102(b) as being anticipated by Burrington et al (6,843,916) made in the previous office action was in error, the rejection should have been under the judicially created doctrine of obviousness-type double patenting. Accordingly, the submission of the terminal disclaimer obviates the rejection.

Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M. McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**EMcAvoy** January 19, 2006